

FULL AUTOMATIC TURNTABLE

# KD-47F KD-47FC(FCL)

## INSTRUCTION MANUAL

# KENWOOD

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88/12 11 10 9 8 7 6 5 4 3 2

### Introduction

Your choice of this product indicates that you are a devotee to excellence in sound reproduction.

We appreciate your patronage and take pride in the long tradition of quality components, that our company represents.

So that you can get the most out of your unit, we suggest that you take the time to read through this manual before you hook up and operate your system. This will acquaint you with operating features, and system-connection considerations, so that your listening pleasure will be enhanced right from the start. You will notice that in all aspects of planning, engineering, styling, operating convenience and adaptability, we have sought to anticipate your needs and desires.

**Keep this manual handy for future reference.**

### For your records

Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your dealer for information or service on this product.

Model \_\_\_\_\_ Serial Number \_\_\_\_\_

### Unpacking

Unpack the unit carefully and make sure that all accessories are put aside so they will not be lost.

Examine the unit for any possibility of shipping damage. If your unit is damaged or fails to operate, notify your dealer immediately. If your unit was shipped to you directly, notify the shipping company without delay. Only the consignee (the person or company receiving the unit) can file a claim against the carrier for shipping damage.

We recommend that you retain the original carton and packing materials for use should you transport or ship the unit in the future.

### Difference by models

| Countries |            | U.S.A.   | Others   |
|-----------|------------|----------|----------|
| Models    |            |          |          |
| KD-47F    | Cartridge  | —        | Supplied |
|           | Dust cover | Supplied | Supplied |
| KD-47FC   | Cartridge  | Supplied |          |
|           | Dust cover | Supplied |          |
| KD-47FCL  | Cartridge  | Supplied | Supplied |
|           | Dust cover | —        | —        |

### Accessories

- EP adaptor ..... 1
- Dust cover hinge (Except some areas) ..... 2
- Turntable belt ..... 1
- Turntable sheet ..... 1
- System control cord (Except some areas) ..... 1

### Contents

**Caution:** Read the following pages marked in  carefully to keep your safety.

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## Before applying power

**⚠ Caution:** Read this page carefully to keep your safety.

### Important!

#### U.S.A., Canada, Australia and Europe

Units shipped to the U.S.A. and Canada are designed for operation on 120 V AC only.

Units shipped to Australia are designed for operation on 240 V AC only.

Units shipped to Europe are designed for operation on 220 V AC only.

These units are not equipped with an AC voltage selector switch and the discussion of such a switch that follows, should be disregarded.

#### All other countries

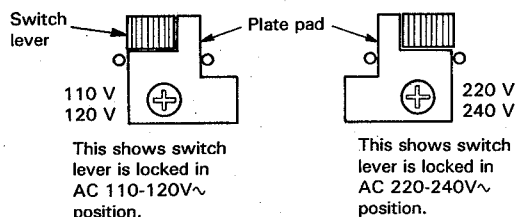
Units shipped to countries other than the above countries are equipped with an AC voltage selector switch. Refer to the following paragraph for the proper setting of this switch.

### AC voltage selection

This unit operates on 110 - 120 volts or 220 - 240 volts AC. The AC voltage selector switch near the center spindle (under the turntable platter) is set to the voltage that prevails in the area to which the unit is shipped. Before connecting the power cord to your AC outlet, make sure that the setting position of this switch matches your line voltage. If not, it must be set to your voltage in accordance with the following direction.

#### Note:

Our warranty does not cover damage caused by excessive line voltage due to improper setting of the AC voltage selector switch.



1. Remove the plate pad and screw with screw driver.
2. Move switch lever to match your line voltage.
3. Attach the plate pad and screw as shown figures.

AC voltage selector switch

## Safety precautions

### WARNING:

TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.



This mark is indicated on the bottom plate of the unit.



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



THE LIGHTNING FLASH WITH ARROWHEAD SYMBOL, WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK TO PERSONS.



THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE APPLIANCE.

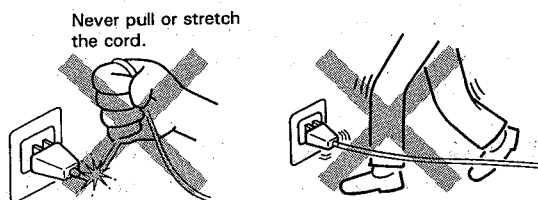
# Important safeguards

**⚠ Caution :** Read this page carefully to keep your safety.

Please read all of the safety and operating instructions before operating this unit. For best results, follow all warnings placed on the unit and adhere to the operating and use instructions. These safety and operating instructions should be retained for future reference.

**1. Power sources** — The unit should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

**2. Power-cord protection** — Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.

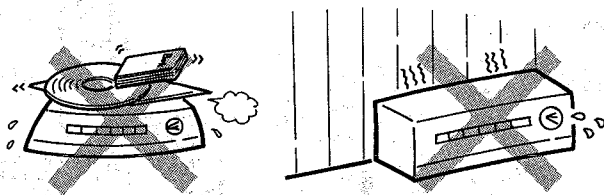


**3. Grounding or polarization** — Precautions that should be taken so that the grounding or polarization means of this unit is not defeated.

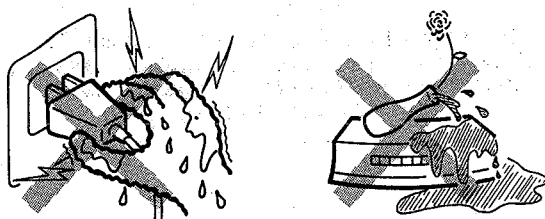
**4. Ventilation** — The unit should be situated so that its location or position does not interfere with its proper ventilation.

To maintain good ventilation, do not put records or a table-cloth on the unit. Place the unit at least 10 cm away from the walls.

Do not use the unit on a bed, sofa, rug or similar surface that may block the ventilation openings.



**5. Water and moisture** — The unit should not be used near water — for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.

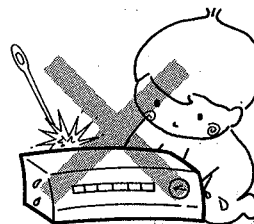


**6. Temperature** — The unit may not function properly if used at extremely low, or freezing temperatures. The ideal ambient temperature is above +5°C (41°F).

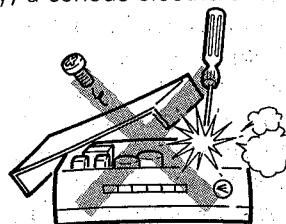
**7. Heat** — The unit should be situated away from heat sources such as radiators, heat registers, stoves, or other units (including amplifiers) that produce heat.



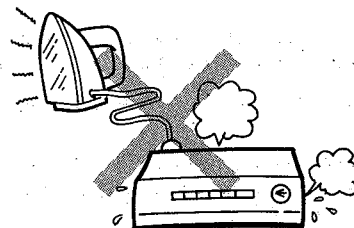
**8. Electric shock** — Care should be taken so that object do not fall and liquid are not spilled into the enclosure through openings. If a metal object, such as a hair pin or a needle, comes into contact with the inside of this unit, a dangerous electric shock may result. For families with children, never permit children to put anything, especially metal, inside this unit.



**9. Enclosure removal** — Never remove the enclosure. If the internal parts are touched accidentally, a serious electric shock might occur.

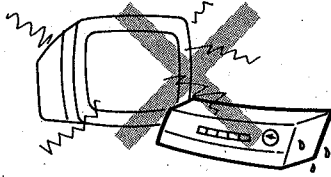


**10. AC outlets** — Do not connect other audio equipment with a power consumption larger than that specified to the AC outlet on the rear panel. Never connect other electrical units, such as an iron or toaster, to it to prevent fire or electric shock.

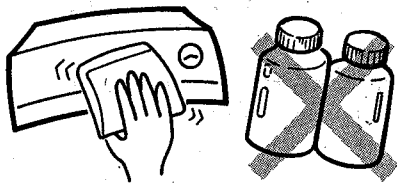


**⚠ Caution:** Read this page carefully to keep your safety.

- 11. Magnetic fields** — Keep the units away from a source of magnetic fields such as TV sets, speaker systems, radios, motorized toys or magnetized objects.

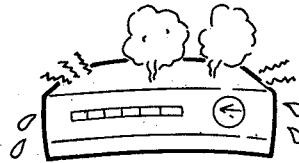


- 12. Cleaning** — Do not use volatile solvents such as alcohol, paint thinner, gasoline, or benzine, etc. to clean the cabinet. Use a clean dry cloth.



- 13. Nonuse periods** — The power cord of the unit should be unplugged from the outlet when left unused for a long period of time.

- 14. Abnormal smell** — If an abnormal smell or smoke is detected, immediately turn the power OFF and pull out the power cord. Contact your dealer or nearest service station.



**POWER OFF!**

- 15. Damage requiring service** — The unit should be serviced by qualified service personnel when:

- A.** The power-supply cord or the plug has been damaged; or
- B.** Objects have fallen, or liquid has been spilled into the unit; or
- C.** The unit has been exposed to rain; or
- D.** The unit does not appear to operate normally or exhibits a marked change in performance; or
- E.** The unit has been dropped, or the enclosure damaged.

- 16. Servicing** — The user should not attempt to service the unit beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

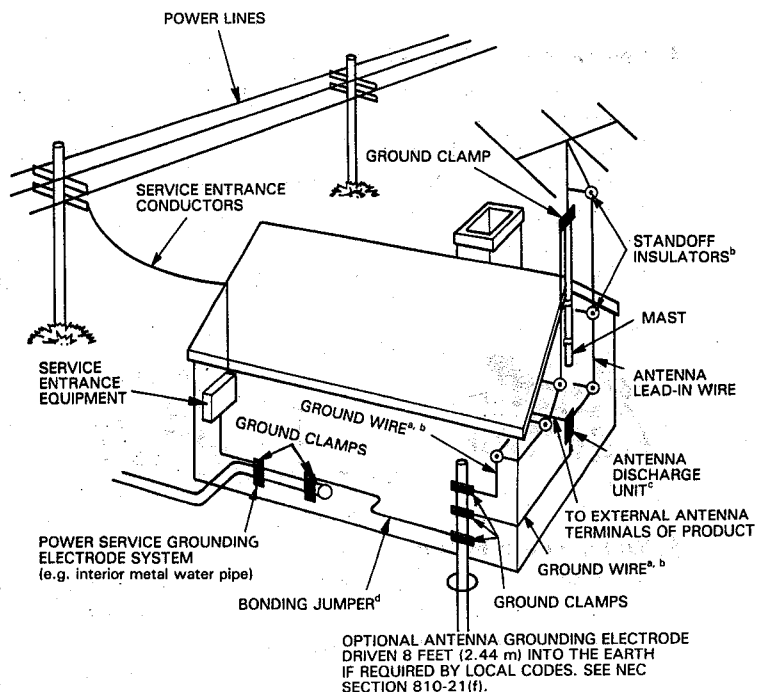
- 17. Outdoor antenna grounding** — If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. Section 810 of the National Electrical Code, ANSI/ NFPA No. 70—1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure.

<sup>a</sup> Use No. 10 AWG (5.3 mm<sup>2</sup>) copper, No. 8 AWG (8.4 mm<sup>2</sup>) aluminum, No. 17 AWG (1.0 mm<sup>2</sup>) copper-clad steel or bronze wire, or larger, as a ground wire.

<sup>b</sup> Secure antenna lead-in and ground wires to house with stand-off insulators spaced from 4 — 6 feet (1.22 — 1.83 m) apart.

<sup>c</sup> Mount antenna discharge unit as close as possible to where lead-in enters house.

<sup>d</sup> Use jumper wire not smaller than No. 6 AWG (13.3 mm<sup>2</sup>) copper, or the equivalent, when a separate antenna-grounding electrode is used. See NEC Section 810-21(f).



**FIGURE**  
**EXAMPLE OF ANTENNA GROUNDING ACCORDING TO**  
**THE NATIONAL ELECTRICAL CODE INSTRUCTIONS**  
**CONTAINED IN ARTICLE 810 — "RADIO AND**  
**TELEVISION EQUIPMENT"**

- 18. Power lines** — An outdoor antenna should be located away from power lines.

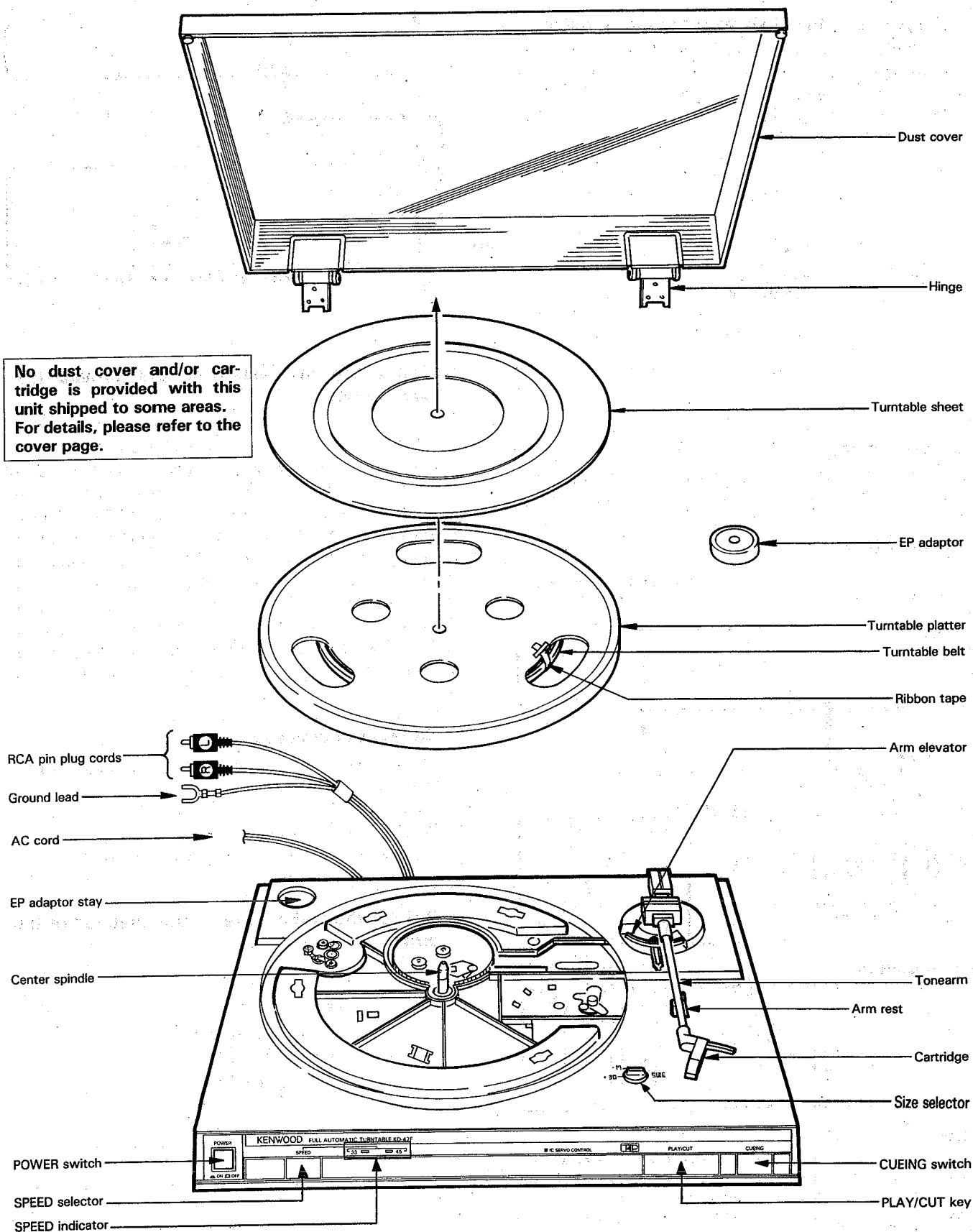
**Notes:**

- 1. Item 3 is not required except for grounded or polarized equipment.
- 2. Item 10 is not required except for units provided with AC outlets.
- 3. Item 17 and 18 are not required except for units provided with antenna terminals.

# Parts nomenclature

- Check that the packing carton contains all the component parts shown in the figure below before you begin to assemble the turntable.
- Keep the packing materials in case you have to repack in future (for moving, servicing, etc.).

- See page 6 for assembly procedures.

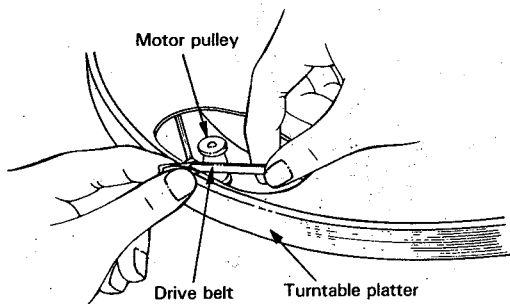


# Reassembly and connection

Units shipped to some areas are sold without phono cartridge. Before proceeding with assembly, install the cartridge in the head-shell on page 9. When your unit is equipped with a V-68 cartridge, proceed as follows. Be sure to follow steps 1 ~ 4 in the sequence given.

## 1. Engage the drive belt with the motor pulley.

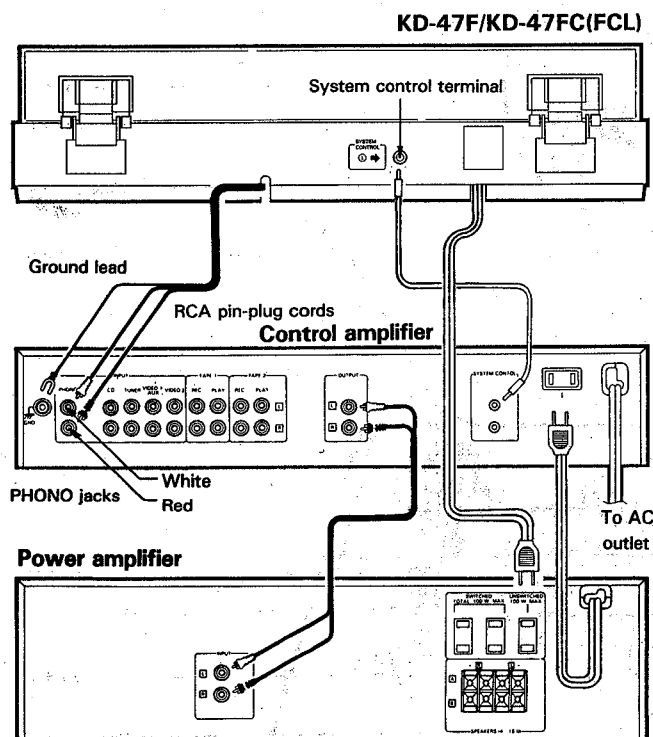
Set the platter carefully on the spindle. Using the ribbon tape, engage the drive belt with the motor pulley, as shown below. Remove the ribbon tape and place the rubber mat on the platter.



## 2. Connections

Turn off the power to your amplifier or receiver. Connect the RCA pin-plug cords, ground lead, then the AC cord.

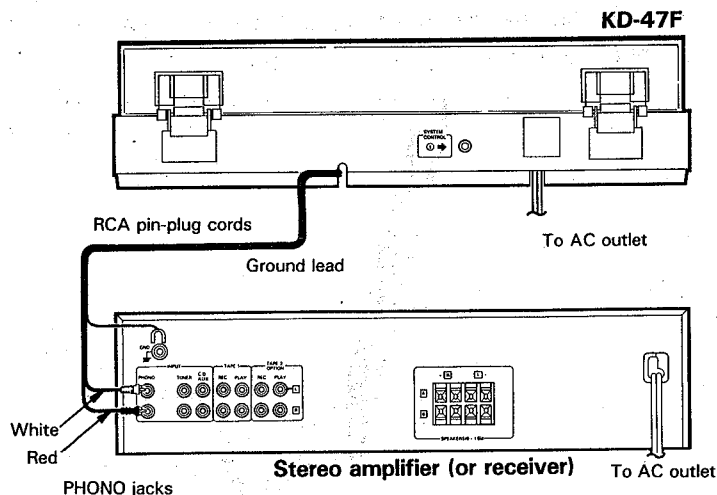
### Except Europe



### Note:

As a microcomputer is used in this unit, beat noise may be generated when receiving broadcasting with the tuner. In such cases, turn off the power switch of this unit or adjust the tuner antenna. Incorrect ground lead connection may sometimes make impossible to activate the muting feature and system control operation.

## Europe



## 3. Connecting the system control terminal (Except Europe)

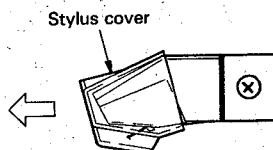
The system control terminal is the control terminal for synchro recording when KD-47F/KD-47FC(FCL) is connected to a unit which is equipped with a system control terminal. Connect this terminal to the system control terminal of the related unit with the supplied system control cord. For synchro recording, the RCA pin-plug cords and ground lead should be connected. (Synchro recording is not possible when only the system control cord is connected.) Set the cassette deck to the recording mode, and press the play/cut switch (PLAY/CUT), synchro recording will be performed. For details, refer to the Instruction Manual of the related unit.

### Setting the amplifier

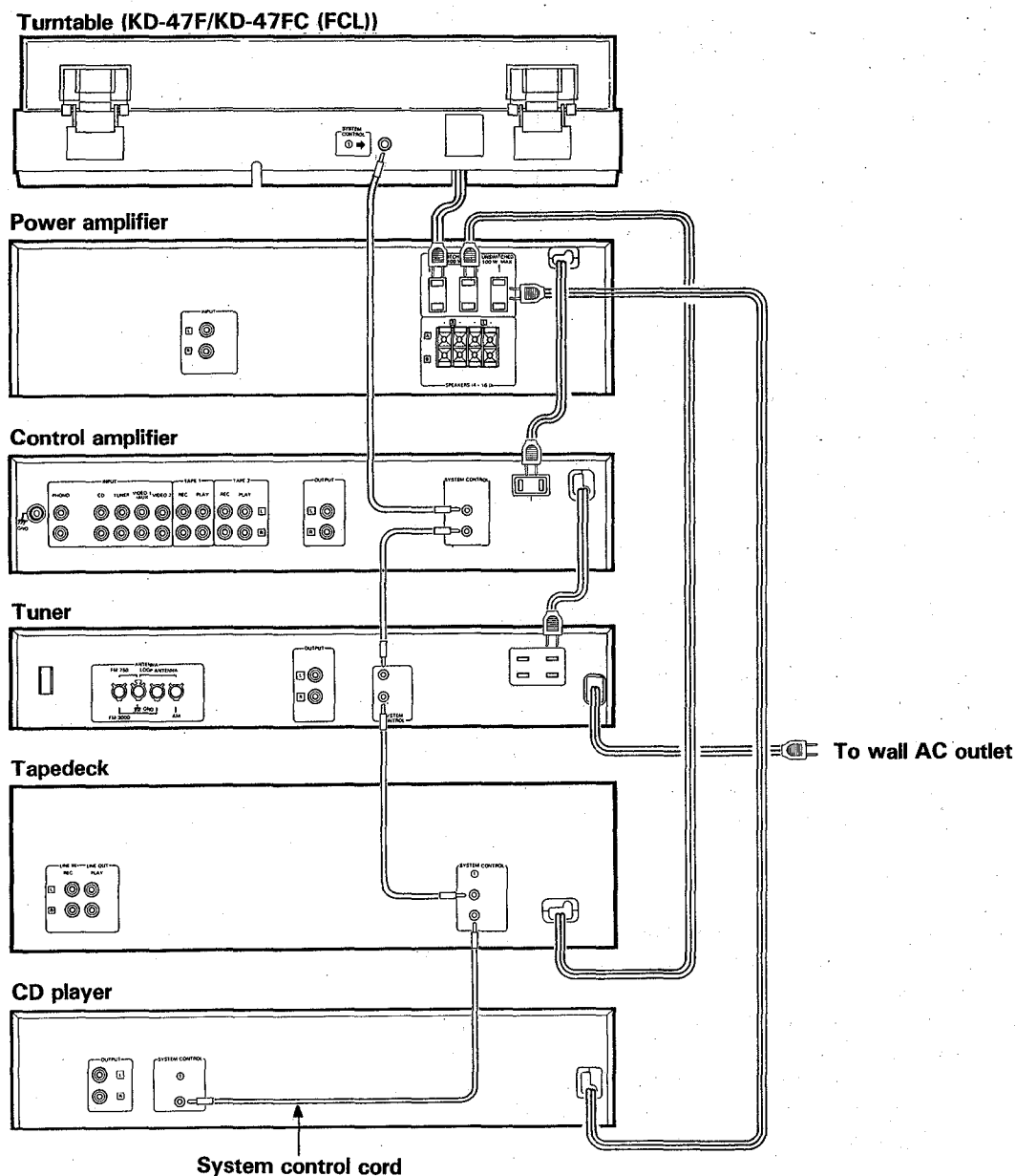
This unit is equipped with the MM cartridge, T4P standard. (Except some areas)

Connect the RCA pin-plug cords of this unit to the PHONO MM jacks of the amplifier or set the cartridge load selector of the amplifier to MM.

## 4. Pull out the stylus cover in the direction of the arrow.



# An example of system control connection (Except Europe)



The remote control socket on. This unit is only for use with associated models which are not available on the U.K. market.

## Note:

For synchro recording, the RCA pin-plug cords and ground lead should be connected. (Synchro recording is not possible when only the system control cord is connected.)

# Operating instructions

## Turn the power on and set a record on the turntable.

### Note:

When the POWER switch is turned ON, the SPEED indicator blinks automatically. Select the speed with the SPEED selector in this period.

This unit does not function in so far as the indicator blinking. When the cue is up (with the CUEING switch pressed in ☐), the SPEED indicator also blinks and automatic play is not possible. To enable automatic play, bring the cue down (by pressing the CUEING switch out ☐).

## Automatic play

1. Select 33 1/3 or 45 by pressing SPEED key.
2. Select the record size for 30 cm or 17 cm.
3. Press PLAY/CUT key.

Playing will start from the first selection and continue to the last, then the tone arm returns to the arm rest and the turntable stops.
4. Control the volume by VOLUME control on the amplifier.
  - While playing, pressing PLAY/CUT or any INPUT key, except PHONO on the amplifier, stops the play (when system control connection), the tone arm returns to the arm rest and the turntable stops.

### Note:

Manual operation is necessary for 25 cm records or other odd sizes.

## Manual play

1. Use operations 1 and 2 for automatic play.
2. Release the tonearm from the arm rest and confirm that the CUEING switch is set to (☐).

Swing the tonearm over the starting position.
3. Press CUEING switch (☐).

This puts the tone arm on the record and playing starts. At the end of the record, the tone arm returns to the arm rest and the turntable stops.
4. Control the volume by VOLUME control on the amplifier.

## To stop the play temporarily

Press CUEING switch to momentarily stop playing.

The tone arm leaves the record.


To restart playing, press CUEING switch again. The record play resumes almost the same position.

## System control operation (Except some areas)

With the KD-47F/KD-47FC(FCL) connected to a unit equipped with a system control terminal, synchro recording, automatic play operation and remote control operation are possible. For detailed operation of system control, refer to the instruction manual of the related unit.



# Maintenance

For U.S.A. only  
Obtain the optionally available  MM cartridge.

With this unit, a MC type cartridge cannot be used.

## Motor lubrication

The motor employs permanently-lubricated bearings. It will operate for more than 20,000 hours without attention to lubrication.

## Periodic check-up

Because a turntable is a mechanical device it is subject to the effects of wear and misadjustment that occurs due to normal handling. Even if your unit appears to function normally, a periodic check-up at intervals of two years or so is recommended to ensure a long service life and proper operation.

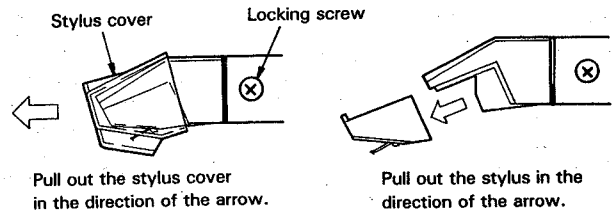
Check with your dealer or authorized service representative.

## Stylus replacement

A replacement stylus can be obtained from your local dealer. Always obtain the specified stylus N-68. When replacing the stylus, take care not to damage the stylus tip. The figure below shows how to replace the stylus.

### Note:

Be sure to turn off the power of the amplifier when replacing the stylus.



## How to replace the cartridge

1. Remove the cartridge locking screw. (To protect the stylus, remove the stylus assembly beforehand.)
2. Pull out the cartridge from the tonearm.  
To install the cartridge, align the pins of the cartridge with the connector of the tonearm and securely insert.

## In case of difficulty

If difficulty is experienced after making the initial set up, the table below might help to eliminate the problem. If the trouble cannot be corrected, check with your dealer.

| Symptom  | Cause   | Correction  |
|--|---|---|
| No sound from both left and right channels or one channel. | <ol style="list-style-type: none"> <li>1. Turntable output cables disconnected.</li> <li>2. The function switch of the amplifier is not set to PHONO.</li> </ol>  | <ol style="list-style-type: none"> <li>1. Check connections to amplifier.</li> <li>2. Set the function switch to PHONO.</li> </ol>  |
| Loud hum, no music.  | Poor connection of turntable output cables.   | Make solid connections to amplifier.  |
| Loud hum with music.                                       | <ol style="list-style-type: none"> <li>1. Turntable output cable picking up hum from AC cord.</li> <li>2. The ground lead of the turntable is not connected to GND terminal of the amplifier.</li> </ol>  | <ol style="list-style-type: none"> <li>1. Separate output cables from AC cord or reverse AC cord plug.</li> <li>2. Connect the ground lead to the GND terminal of the amplifier.</li> </ol>   |
| Buzzing noise with music.                                  | Turntable output cable picking up TV signal.  | Relocate output cord for minimum pickup.  |
| Howling drowns out music when volume is increased.         | Speaker vibration is picked up by turntable.  | Separate turntable from speakers.   |
| Turntable platter does not turn.                           | Poor AC plug contact.   | Check connection. Make sure AC outlet is active.  |
| Poor tracking.   | Excessive dust on record or stylus.   | Remove dust from stylus or record.  |
| Synchro recording is not possible.                         | <ol style="list-style-type: none"> <li>1. The system control cord is not connected.</li> <li>2. The cassette is not loaded correctly.</li> <li>3. The record lock-out tab on the cassette has been removed.</li> <li>4. The cassette deck is in playback mode.</li> </ol> | <ol style="list-style-type: none"> <li>1. Connect the system control cord securely.</li> <li>2. Load the cassette tape correctly.</li> <li>3. Use a new cassette or place a piece of adhesive tape over the opening from which the tab has been removed.</li> <li>4. Set the cassette deck in stop mode.</li> </ol> |

# Specifications

## Motor and Turntable

|                         |  |
|-------------------------|--|
| Drive System .....      | Belt-drive system                                      |
| Motor .....             | FG Servo Motor   |
| Turntable Platter ..... | 29.6 cm (11-5/8") diameter<br>0.35 kg (0.77 lb) weight |
| Speeds .....            | 2 speeds, 33-1/3 and 45 rpm                            |
| Wow & Flutter .....     | 0.05% (WRMS)<br>DIN: 0.07%                             |
| S/N (Rumble) .....      | DIN: 40 dB (Unweighted)<br>DIN: 70 dB (Weighted)       |

## Tonearm

|                                |                                     |
|--------------------------------|-------------------------------------|
| Type .....                     | Static-Balanced Straight<br>Tonearm |
| Effective Tonearm Length ..... | 222 mm (8-3/4")                     |
| Overhang .....                 | 17 mm (11/16")                      |
| Tracking Error .....           | Less than 2.2°                      |
| Tracking Force                 |                                     |
| Variable range .....           | 1.25 g (fixed)                      |
| Usable Cartridge .....         | T4P                                 |

## Cartridge

|                              |                                 |
|------------------------------|---------------------------------|
| Furnished Cartridge .....    | T4P MM cartridge (V-68)         |
| Frequency Response .....     | 20 ~ 20,000 Hz                  |
| Channel Separation .....     | Better than 22 dB (1,000 Hz)    |
| Output Voltage .....         | 2.5 mV<br>(1,000 Hz, 5 cm/sec.) |
| Load Impedance .....         | 47 k ohms                       |
| Stylus .....                 | 0.6 mil diamond                 |
| Optimum Tracking Force ..... | 1.25 grams                      |
| Compliance .....             | $7 \times 10^{-6}$ cm/dyne      |
| Replacement Stylus .....     | N-68                            |

## Miscellaneous

|                          |  |
|--------------------------|--|
| Power Requirements ..... | AC 120 V, 60 Hz: U.S.A.<br>and Canada<br>AC 240 V, 50 Hz: Australia<br>AC 220 V, 50 Hz: Europe<br>AC 110-120 V/220-240 V,<br>50/60 Hz (Switchable): Other<br>countries |
| Power Consumption .....  | 3.5 watts  |
| Dimensions .....         | W 420 mm (16-9/16")<br>H 109 mm (4-5/16")<br>D 343 mm (13-1/2")  |
| Weight (Net) .....       | 3.4 kg (7.5 lb)  |

## Note:

We follow a policy of continuous advancements in development. For this reason specifications may be changed without notice.